Onchocerca lupi on Navajo Nation "Be the EYE for O. lupi" January 2020



Dog with conjunctivitis and nodules around his eye. (NNVM)

What is It?

Onchocercha lupi is a parasite that can infect dogs, cats and humans. O. lupi is a close relative to Onchocerca volvulus that causes River Blindness in people in Africa. The way O. lupi spreads is currently unknown but the bite of black fly may be the mode of transmission. Navajo Nation Veterinary Management has diagnosed a handful of cases since 2012 in dogs. We are unsure if incidence is increasing in dogs and cats.

What are the symptoms in dogs and cats?

Most cases involving dogs have masses found anywhere around the eyeball, including pink tissue around the eye even behind the eyeball. The masses can be painless or may cause redness, drainage, inflammation and itching of one eye or both eyes. Treatment includes surgical removal and long term medication (3 months to years).

What are symptoms in people?

People infected with *O. lupi* can get masses around the eyes in the conjunctiva tissue with some inflammatory reaction. In rare cases the mass can embed in cervical tissue. Navajo Nation has had 4 confirmed human cases since 2010. Dogs infected with *O. lupi* CAN NOT infect humans; the mode of transmission is thought to be the bite of a black fly.

What are we doing about O. lupi and O. lupi on Navajo Nation?

The NNVM program is currently doing canine (dog) surveillance testing across Navajo Nation with the Mobile Unit and at Satellite clinics (Tse Bonito, Chinle, Shiprock Clinics) free of charge to determine disease incidence and possible locations.

Currently the Navajo Nation Veterinary Management has collected 254 samples (180 dogs, 74 cats) from across the Navajo Nation during our 2019 Summer Wellness with the Mobile Unit and at satellite clinics. We have had 7 positive cases that had no clinical signs – 6 dogs and 1 cat. These positive cases were localized to Chinle (3), Lukuchukai area(1) and Tuba City area(1). One case was from Tohatchi MU site but dog resided in Gallup, NM and the last case from Aneth, Utah.

How can you help?

Make an appointment with Navajo Nation Mobile Unit or satellite clinics for testing on your dogs and cats over 2 years of age. Sedation is a requirement so an appointment needs to be made prior to testing.

Be a part of the Rez-Solution. Let's be Proactive and Not Reactive.

What is the Reason for Testing?

There only a handful of "Hotspots" in the United States with Navajo Nation being one of the areas that has *O. lupi* infections. *O. lupi* is a communicable disease and humans can be infected so the Navajo Nation Veterinary Management's goal is to be forefront in locating possible "Hotspots" so we can better help our people and pets to be informed and prevention methods. The Navajo Nation Veterinary Management is a huge supporter of "One Health" Initiative in that we "All Depend on One Another" - human, animal, plant, insect and mother earth.





